Motorola MC70 Mobile Computer from MICROS

Engineered to withstand rigorous use in extreme environments and working conditions, the Motorola MC70 ***can endure multiple drops, a range of temperatures, moisture, dust, and still deliver reliable performance.***

Using the Microsoft Mobile 5.0® Operating System, the MC70 runs at higher encryption levels and faster speeds with 802.11a/b/g. Couple all this with the 3 Year Bronze Service Plan and the MC70 will exceed expectations. And cost effective wireless mobile printing is available with the Epson TM-P60 Thermal printer (information for this unit begins on page 7).

Application Support

Application	Version
RES	3700 Version 4.6 (**Bluetooth Printing Not Supported**)
LES	9700 Version 3.1 SP4 & 3.2 SP1
Simphony	Future release.

MC70 Technical Specifications (MICROS Configuration)

Item	Details
Dimensions:	6 in. L x 3.1 in. W x 1.5 in D…15.3 cm L x 7.6 cm W x 3.7 cm D
Weight	11.2 oz./314g (excluding battery)
Display:	Color 3.5" QVGA with backlight,65K colors, 240 W x 320 L
Touch Panel:	Glass analog resistive touch
Backlight:	LED backlight
Main Battery:	Extended Life 3.7V, 3800 mAh Smart Battery
Backup Battery:	Ni-MH battery (rechargeable) 20mAh 1.2V, 2 cells (not user-accessible)
Expansion slot:	User accessible SDIO slot (with secure cover)
Keypad	26 button Numeric keypad
CPU:	Intel® XScale™ 624 MHz processor w/64MB RAM/128MB ROM

Operating System:	Microsoft® Windows™ Mobile 5.0 Premium
Operating Temp:	**14° F to 122° F**
Drop Specification:	***4 ft. drop to concrete, 6 drops/6 sides over operating temp range; 5 ft. drop to concrete, 2 drops/6 sides at ambient temp of 73° F***
Tumble Specification:	***1,000 1.6 ft./.5 m tumbles (2,000 drops)***
Sealing:	**IP54**
WLAN Radio:	Tri-mode IEEE® 802.11a/b/g
Data Rates Supported:	1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps
Antenna:	Internal
Bluetooth:	Class II, v 1.2
Scanner	1D linear scanner

MC70 Wireless Security

- WPA2, WPA , WEP (40 or 128 bit)…**WEP IS NOT PCI-COMPLIANT**
- TLS, TTLS (MS-CHAP), TTLS (MS-CHAP v2), TTLS (CHAP), TTLS-MD5, TLS-PAP, PEAP-TLS, PEAP (MS-CHAP v2), AES, LEAP

CAL Client and CAL Server

The MC70 is released with CAL Client version 73 which contains additional security features for CAL reconfiguration. When re-configuring the CAL, you will be prompted to enter a security code in order to continue. The code emulates the traditional MICROS equation used in diagnostic testing. CAL Server 15 is required in order to use the MC70 (without it, the MC70 will not be recognized as a MICROS device).

Battery Life

There are many factors that contribute to battery life. Because of this, REPLACE THE BATTERY ONCE EVERY YEAR. The MICROS configuration includes the 3800mAh extended life battery in the standard configuration. A document describing battery life dependencies and how to maximize battery life is available.

MC70 Warranty

MICROS bundles the MC70 with a Motorola 3 Year Bronze Service Plan including Comprehensive Coverage and Application Loading. This provides the customer with a complete 3 Year Total Cost of Ownership price. These depot services are provided directly by Motorola.

MC70 Return Materials Authorization (RMA)

The items listed in this PMA are not covered by MICROS. Once shipped from MICROS, all service must occur from Motorola direct. RMA # can be obtained from Motorola by going to http://myMotorolacare.Motorola.com or by calling 1.800.653.5350

MC70 Part Numbers

400384-015	**KIT, MC70 Terminal W/3YR Comprehensive Support** Contains: • MC70 – Color handheld terminal with Mobile 5.0 Premium Numeric Keypad, 802.11a/b/g WLAN (Includes Hand Strap) • Extended Life battery • MICROS Mobile Client Application Loader • Prepaid 3YR Symbol Bronze Depot Comprehensive Maintenance Contract
000221-015	MC70 4-Slot Spare Battery Charger Contains: • 400384-141 – 4 slot battery charger • 400384-137 – US Power Supply • 200153-010 – US Line Cord
600526-022	MC70 Wall Mount Cradle Bracket for mounting Four-Slot Cradles Only
600540-015	MC70 Rigid Holster
600571-006	MC70 Spare Spring Loaded Stylus (Pack of 3)
400384-216	Extended life spare battery (Spare Part) The MC70 already includes an Extended life battery
700293-730	MC70 Magnetic Stripe Reader – MSR
400384-039	MC70 4-Slot Unit Charging Cradle, Includes Power Supply & US Line
700503-066	USB interface cable for ActiveSync (Spare Part)

All prices are exempt from volume discounts.
All Motorola MC products are subject to a **30-day lead-time.**

Motorola 3 Year Bronze Service Plan Overview

All MICROS Wireless Handheld Mobile devices are sold with the Motorola 3-Year Bronze Service Plan from Motorola. The Motorola Bronze Service Plan with "Comprehensive Coverage" is a unique prepaid program that includes normal wear and tear, as well as coverage for internal and external components damaged through accidental breakage. This offer also includes coverage to styluses, screen protectors, hand straps and battery doors (where applicable) that ship together with Motorola's MC-Series mobile computers, when purchased through DCRS Solutions, but does not include consumables or peripherals (as noted in the following pages). **Bundled with the MC-Series of mobile computers from MICROS**, the Motorola Bronze Plan with Comprehensive Coverage agreement offers multi-year coverage to significantly reduce unexpected repair expenses, while helping to protect a customer's investment for the first 3 years. **This Service Plan is a Depot Plan that is provided directly from Motorola, not from MICROS or DCRS Solutions.**

- **Service Center Repair with 3-Business Day Turnaround Objective (this turnaround time represents the time a unit spends at Motorola during the repair process)**
- **Comprehensive Coverage (includes Wear & Tear)**
- **Priority Telephone Support with 4 Hour Call Escalation**
- **Updates, fixes and new releases for platform software***
- **Access to web-based FAQs and Troubleshooting Tips**
- **Ground Shipment of Outbound Units**
- **Application Loading**

***** MICROS will provide the Motorola repair facility with the latest approved platform including the Mobile Client Application Loader (CAL) application. This platform will be loaded onto the device prior to return shipment. The approved platform may not include all platform fixes released by Motorola.

The Bronze Service Plan is NOT an extended warranty, but is a value added maintenance contract. The Motorola "standard warranty" provides only limited coverage for manufacturer's defects, and has a standard repair turnaround of 10-Business days.

Details of the Motorola Bronze Service Plan

Motorola provides for product repair at a Motorola-operated facility that employs the same test equipment and fixtures used in the manufacture of the equipment. Products are diagnosed and restored to factory specifications via:

- Repairs, alignments, adjustments, and restorations, if appropriate, of any covered product(s) that malfunctions while being used within the operational and environmental parameters specified by Motorola.
- Repairs due to accidental damage including displays, keypads and internal components. **(Batteries, and Magnetic Card Readers are not covered)**
- Product updates, if applicable, as may be defined from time to time by a Motorola Engineering Change Order.
- Defined telephone support.

3-Day In-House Turnaround Time

Motorola Responsibilities

1. Provide standard Service Center repair with three (3) business day's in-house turnaround. **Please note: In-house turnaround time represents the time a unit spends at Motorola in the repair process, the 3-Business Day turnaround time is an objective that is not guaranteed, and this time does not include transit time.**
2. Provide service on standard Motorola workdays: Monday through Friday 8am to 5pm, excluding holidays observed by Motorola. See list of Motorola observed holidays on page 4.
3. Provide **ground shipment** on all outbound repairs, or ship units via customer designated carrier and method, charged to customer's account.
4. Guarantee units will perform within the operational and environmental parameters specified by Motorola for 30 days from date of return shipment. Motorola will provide repair with an in-house turnaround of three (3) business days. Turnaround time represents the time a unit spends at Motorola in the repair process; it does not include time in transit. Turnaround times are a target and are not a guarantee.
5. Motorola will provide ground shipment on all outbound repairs to specified customer delivery location and bear all costs and risks associated with transportation; or, ship units via customer-designated carrier and method, charged to customer's account.
6. Motorola will ensure units will perform within the operational and environmental parameters specified by Motorola for 30 days from date of return shipment.
7. At the time an eligible MC mobile computer is returned to the service center for repair, Motorola will replace missing or damaged styluses, screen protectors, hand straps and battery doors (where applicable), as indicated by the customer on the Return Material Authorization (RMA).
8. Motorola will repair accidental damages to internal and external components that occur during normal use. Specific examples of items included under Comprehensive Coverage include restoring, repairing or replacing:
   - Damaged housings.
   - Cracked or broken plastics.
   - Cracked or broken displays.
   - Cracked or broken touch screen/digitizers.
   - Cracked or missing keyboards/keypads.
   - Missing or broken triggers.
   - Cracked or damaged exit windows.

- Missing or damaged styluses.
- Missing or damaged hand straps.
- Missing or damaged screen protectors.
- Missing or damaged battery doors, as applicable.

End User / Customer Responsibilities

1. **Optional:** Designate a carrier and shipment method and provide current carrier account number to be billed. Overnight shipping maximizes the value of this service. **Cost of standard ground shipment from the repair facility to customer location is included in this program, but the cost for an alternative ship method is customer's responsibility. Costs for shipping the device to the repair facility are also customer's responsibility.**
2. **Contact Motorola before the return of the unit to the Service Center for repair** to get a Return Material Authorization (RMA) # assigned and entitlement ensured. Perform one of the two below options:
   - Request RMA # at http://myMotorolacare.Motorola.com and print a shipping label for the return. Register at the site for a login and it will allow you to track your equipment repairs.
   - Contact Motorola at 1-800-653-5350 and request an RMA #
     Please Note: Units received at Motorola without an RMA # may experience a delay in processing and not be repaired within the contracted turnaround period.
3. Ensure the RMA # is clearly visible on the outside of the package on the shipping label.
4. Package all items to normal commercial standards. **Motorola original packaging is recommended.**
5. Provide for the safe transport of products to the Motorola Service Center. Bear all costs and risks associated with this transportation.

Telephone Support – 4 Hour Response

Motorola Responsibilities

1. Provide support coverage Monday through Friday 8am to 5pm local time, excluding holidays observed by Motorola.
2. Provide callback response within four (4) business hours. The Motorola representative will:
   - Assess the nature of the problem.
   - Assist/perform problem determination and manage problem resolution.
3. Provide telephone support coverage for Motorola systems and base software, excluding custom software modifications and customer configurations. This includes providing:
   - Support the current version of the system and base software, and two prior releases
   - Help in filling out a case report.
   - Assistance in verifying a system or base software problem.
   - Interim software updates, local patches, bypasses, and/or documentation that address a verifiable customer problem, whenever available.

End User / Customer Responsibilities

1. Supply modem and phone line on site if remote dial-in to the customer's system is required for complete diagnosis or remedy.
2. Incur additional charges at prevailing rates for any of the following activities which are not covered under Telephone Support service:
   - Problem determination and/or work performed to resolve issues with non-covered products; i.e., any hardware or software products not specifically listed on the Service Order Form.
   - Repair of problems caused by operator error, unauthorized alterations or attempted repair, direct lightning damage, or other natural or manmade disasters.
   - Non-remedial work such as but not limited to administration and operator procedures, reprogramming, and operator or user training.
   - Performance of any file backup or restoration processes, other than remote archive and restoration if that option is purchased.
   - Standby at customer's request.
   - Completion and test of incomplete application programming or system integration if not contracted for by Motorola and specifically listed as covered.

Constraints and Restrictions
The customer will incur additional charges at the prevailing rates for any of the following activities, which are not covered under Service Center Support:

- Replacement of consumable parts or accessories, as defined by product, which include but are not limited to batteries, cables, print heads, carrying cases, paper, diskettes, tapes, ribbons, etc.
- Magnetic Card Readers are not covered and are not considered repairable items. In the event of a failure on the MCR, replacement is the only option.
- Repair of problems caused by operator error, abuse, unauthorized alterations or attempted repair, direct lightning damage, or other natural or manmade disasters.
- Non-remedial work such as but not limited to firmware or protocol upgrades, reprogramming, and product configuration.
- Repair of non-covered products (see below about coverage for Peripherals).
- Repair of problems caused by using the device outside of the product's environmental specifications or repaired by a third party.

Application Loading – Your contract includes a custom provision for reloading the Client Application Loader (CAL) application onto the device. The Motorola repair facility will reload the repaired terminal with the latest approved platform image and MICROS Mobile CAL version onto the handheld. The device should arrive in a similar state to the handhelds that are shipping from MICROS. **This feature does not provide for the device to be loaded with a specific application or for any custom configuration to be performed by the Motorola repair facility.**

MyMotorolaCare Web Portal
Your single point of access to your information regarding Motorola Care Services, custom tailored to deliver the data you need through the Internet: http://myMotorolacare.Motorola.com

Warranty on Cradles and Other Peripherals

Motorola MC Peripherals come with a 90-day limited Depot warranty from Motorola, and include:

Cradles and Chargers	90 day depot warranty
Clip on Magnetic Card Reader	90 day depot warranty
Batteries	90 day depot warranty

This 90 day depot warranty provides for the repair of the product and is limited to:

- Repair, alignment, and adjustment to the original manufacturing specifications of any covered product(s) that malfunction due to a manufacturing defect while being used within the operational and environmental parameters specified by Motorola.
- Product updates, if applicable, as defined from time to time by a Motorola Engineering Change Order, applied at Motorola's discretion.

A Depot warranty indicates the customer must return the defective equipment back to Motorola for warranty repair. The depot warranty for these Peripherals provides a manufacturer turn-around of 10 business days, excluding Holidays, from receipt of the warranted device.

Motorola observed Holidays are New Years Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. Once repairs are complete, Motorola will ship the repaired device via UPS ground on all outbound shipments. Customers who desire overnight shipments after the warranty repair is completed must provide Motorola with a current air bill.

The process for obtaining a depot repair is to call Motorola at **1-800-653-5350** to get an RMA number for return of the faulty unit. You may also request an RMA via the web: http://myMotorolacare.Motorola.com. After obtaining the RMA number, ship to the address provided by Motorola.

Battery Life
There are many factors that contribute to battery life. Because of these factors both MICROS and Motorola recommend replacing the handheld's batteries **at least once every year. MICROS has chosen to offer the MC Series with the extended life battery in the standard configuration**.
Documents describing "BEST PRACTICES' for caring for the Motorola MC Series and a "BATTERY GUIDE" for maintaining Motorola batteries can be found on the DCRS web site

Motorola BEST PRACTICES http://www.dcrs.com/pics/db/document_library/000143.pdf
Motorola BATTERY GUIDE http://www.dcrs.com/pics/db/document_library/000144.pdf

Important Contact Information
Online Support Request: http://www.Motorola.com/contact/services_support_contact.html

Telephone: Monday – Friday 8 am – 8 pm 1-800-653-5350 or 1-631-738-6213

Additional Resources: My Motorola Care: http://myMotorolacare.Motorola.com

Motorola Support http://support.Motorola.com

Epson P60 Thermal Printer
Based on the best-selling TM-T88 series, Epson's compact, cost effective wireless mobile printer is designed to meet mobility needs for high-speed, portable, thermal receipt printing. The P60, used with the Motorola MC70, provides on-demand printing in both full service and quick service environments. All Epson P60 printers sold by MICROS have a 3-year Spare-In-The-Air warranty.

MICROS offers the P60 printer with 802.11b interface to provide local printing when using Micros RES4 and LES 9700. NOTE: Infrared printing is not supported. **Bluetooth printing is not supported in RES4.**

Printing
MICROS has integrated with the Epson P60 portable printer for wireless printing.

P60 Features
- Belt Clip
- Drop-in battery for quick battery changes
- Drop-in paper loading
- 4' drop to concrete

P60 Specifications

Item	Details
Print method	Thermal Line Printing
Dot/line	420/432 dots
Column capacity	58mm paper, Font A/B/C, 35/42/52 columns; 60mm paper, Font A/B/C, 36/43/54 columns
Character size	1.5(W) x 3.0(H)/1.25(W) x 3.0(H)/1.0(W) x 2.0(H)mm
Character set	95 Alphanumeric, 48 International, 128 x 10 Graphic
Bar Code printing	UPC-A, UPC-E, JAN8 (EAN), JAN13 (EAN), CODE 39, CODE 93, CODE 128, ITF, CODABAR, 2D bar codes: PDF417, QR CODE, MAXICODE
Characters/inch	17/20/25 cpi
Available Interface	802.11b with WPA2 or Bluetooth (RS-232 port included)
Data buffer	128 bytes
Print speed (max)	Receipt version 70mm/second
Paper width	58mm or 60mm width (receipt version)
Paper diameter	51mm (maximum)
Auto-cutter	Partial cut, left uncut (receipt version)
Audible alert	Programmable buzzer
Indicators	Battery charge level, wireless connection status, error condition
Software	Browser-based configuration and proprietary remote wireless management tools (802.11b version only)
Power	Custom Lithium- Ion battery pack, AC adapter (option)
Charging	AC adapter (4 hours to full charge) 400384-129, custom external rapid charger (2.5 hours to full charge) 400384-121
Reliability	10 million printing lines 500,000 autocutter
Operating temp	0° C to 50° C
Drop	4 foot drop to Concrete
Battery life	Depends upon printing usage
Dimensions	103 x 159 x 65mm (W x D x H) {4.05 x 6.25 x 2.55”}
Weight	Receipt version 670g\ 1.7lbs with battery

Epson P60 Warranty and Service

The Epson P60 printer is provide by MICROS with a 3-Year Spare-In-The-Air (SITA) overnight replacement warranty provided directly from Epson to the End User. Once the problem has been diagnosed as a P60 hardware problem, the End user must follow the directions below to receive a replacement unit. Troubleshooting the problem down to the hardware should be done using by following normal procedures for software support. For helpdesk Plan customers, this is done through the DCRS Solutions helpdesk to help determine if your software is properly programmed and if you have a hardware failure.

Note: MICROS & DCRS Solutions are not directly involved in this service. MICROS & DCRS Solutions are reselling an Epson support plan, as this is the most cost effective program for end customers. **The Epson Program Enrollment form MUST BE COMPLETED by the End User. The Epson Program Enrollment form, including Terms and Conditions, is available at:**

http://www.dcrs.com/pics/db/document_library/000145.pdf

Summary of the Spare-In-The-Air process:

1. For each P60 printer, fill out the registration form packaged with the printer and mail or fax it to Epson at the address listed. **This should be done when the printer is installed**. Also packaged with the printer is a welcome letter, explaining how to get support from Epson.
   How to request a product exchange:
   a. Call the DCRS helpdesk to first troubleshoot the printer. If your helpdesk cannot solve the problem over the phone, contact Epson at:
      1-800-442-2083
      Monday – Friday, 7:00 a.m. to 4:00 p.m. PST
      Excluding Epson recognized holidays
   b. Identify yourself to Epson and provide:
      - Profile Number (A profile number is contained with your registration form)
      - Payment information. Epson will require payment in advance to ensure that the failed printer is returned. If the damaged printer is returned to Epson, no payment will be required. Please see the terms and conditions posted on our website at the link above.
      - Product Serial Number
      - Epson Product Model Name (TM-P60)
      - Shipping Information (Contact Name, Complete Address, and Phone #)
   c. Epson will provide a return authorization number for each unit requiring a replacement to Help Desk and ship the unit via overnight delivery. Orders received after 2:00 p.m., PST will be shipped next business day.
2. Follow the instructions from the Epson helpdesk which will include a location to ship your bad printer as well as when you will receive your replacement.
   How to return the defective unit to Epson:
   a. A prepaid return shipping document and instructions on how to return the defective unit will arrive with the replacement unit.
   b. Save the packing list, box and packing materials and use to ship defective unit to Epson within **3** days**. Unreturned product will result in a charge for the replacement cost.**
   c. Follow the instructions for packaging the defective unit and complete the return shipping document with all the necessary information as provided on the instructions.
   d. Retain a copy of the shipping document for your records and affix to the box.
   e. Properly place the return authorization number on the box and call carrier for pickup.
3. If the issue is determined to be out of scope and not covered by the warranty, Epson may require a method of payment in order to repair the unit.

P60 Part Numbers

Part #	Description
400490-252	TM-P60 Printer w/Bluetooth Interface w/Battery, Belt Clip, Power Supply and 3-Year Spare-In-The-Air Warranty
400490-251	TM-P60 Mobilink Printer w/802.11b Interface w/Battery, Belt Clip, Power Supply and 3-Year Spare-In-The-Air Warranty

P60 Accessories

Part #	Description
400384-121	P60 External Rapid Battery Charger (used with Spare battery 400384-220)
400384-220	P60 Spare Battery
600540-041	Shoulder Strap for the Epson P60 Printer

All prices are exempt from volume discounts.
All Epson P60 products are subject to a **30-day lead-time.**